This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (currently amended) A wireless communication unit ~~(300)~~ comprising a linearised transmitter ~~(325)~~ having:

a forward path for routing a signal to be transmitted;

a power amplifier ~~(324)~~ for transmitting a linearised radio signal;

a feedback loop, operably coupled to the power amplifier ~~(324)~~ and the forward path, comprising a loop adjustment function ~~(442)~~, wherein the forward path and feedback loop comprise quadrature circuits; and

a processor ~~(322)~~ for applying a first training signal to a first quadrature circuit loop for routing through the forward path, power amplifier and feedback path to determine at least one first parameter setting of the loop adjustment function ~~(442)~~, wherein ~~the wireless communication unit (200) characterised by:~~

said processor ~~(322) applying~~ applies a second training signal to a second quadrature circuit loop to determine at least one second parameter setting of the loop adjustment function ~~(442)~~.

2.   (currently amended) The wireless communication unit ~~(200)~~ according to Claim 1, wherein ~~the wireless communication unit (200) is further characterised by~~ said first training signal and said second training signal ~~having~~ have substantially the same signal parameters~~, for example where they are phase training signals~~.

3.   (currently amended) The wireless communication unit ~~(200)~~ according to Claim 2, wherein ~~further characterised by~~ the loop adjustment function is ~~being~~ a phase shifter ~~(442)~~ for adjusting a phase shift in the first and second quadrature circuit loops.

4.   (currently amended) The wireless communication unit ~~(300)~~ according to Claim 3, ~~wherein the wireless communication unit (300) is~~ further comprising ~~characterised by~~ a phase calculation function ~~(460)~~, operably coupled to said phase shifter ~~(442)~~, to calculate a phase shift

in each of the first and second quadrature circuit loops, thereby ascertaining an imbalance therebetween.

5.	(currently amended) The wireless communication unit ~~(300)~~ according to ~~any preceding Claim~~ Claim 1, wherein ~~the wireless communication unit (300) is further characterised by~~ said processor ~~(322) applying~~ applies said first training signal to the linearised transmitter prior to applying said second training signal.

6.	(currently amended) The wireless communication unit ~~(300)~~ according to ~~any preceding Claim~~ Claim 1~~, further characterised by~~ wherein the linearised transmitter is~~being~~ a Cartesian feedback linearised transmitter such that said adjustment is applied to a real-time feedback loop.

7.	(currently amended) The wireless communication unit ~~(300)~~ according to ~~any preceding Claim~~ Claim 1, wherein said wireless communication unit is capable of operation on a TETRA communication system.

8.	(currently amended) The wireless communication unit ~~(300)~~ according to ~~any preceding Claim~~ Claim 1, wherein said wireless communication unit is a subscriber unit or a base transceiver station.

9.	(currently amended) A linearised transmitter integrated circuit ~~(320)~~ comprising:
	a linearised transmitter for transmitting a linearised radio signal, and
	a forward path comprising quadrature circuits for routing a signal to be transmitted and for operable coupling to a power amplifier ~~(324)~~ for transmitting a linearised radio signal;
	a feedback loop, operably coupled to the forward path and for operable coupling to an output of a power amplifier ~~(324)~~, wherein the feedback loop comprises a loop adjustment function ~~(460)~~, and quadrature circuits; and
	a processor ~~(322)~~, operably coupled to the feedback loop for applying a first training signal to a first quadrature circuit loop in the linear transmitter integrated circuit to be routed

through the forward path, power amplifier ~~(324)~~ and feedback path to determine at least one first parameter setting of the loop adjustment function ~~(460)~~,

wherein ~~the linearised transmitter integrated circuit (320) characterised by~~: said processor ~~(322) applying~~applies a second training signal to a second quadrature circuit loop in the linear transmitter integrated circuit to determine at least one second parameter setting of the loop adjustment function ~~(460)~~.

10.   (currently amended) A method of training a linearised transmitter ~~(325)~~ having a forward path, a power amplifier ~~(324)~~ and a feedback loop comprising a loop adjustment function, wherein the forward path and feedback loop comprise quadrature circuits; the method comprising the steps of:

applying a first training signal to be routed through a first quadrature circuit loop of the forward path, power amplifier and feedback path; and

determining at least one first parameter setting for the loop adjustment function based on the first training signal,

~~the method characterised by the steps of~~:

applying a second training signal to a second quadrature circuit loop of the forward path, power amplifier and feedback path; and

determining at least second parameter setting for the loop adjustment function based on the second training signal.

11.   (currently amended) The method of training a linearised transmitter ~~(325)~~ according to Claim 10, the method further ~~characterised by the step of~~ comprising adjusting said loop adjustment function based on a determination made on the first training signal and a determination made on the second training signal.

12.   (currently amended) ~~A storage medium storing proessor-implementable instructions or data adapted to perform the steps of method Claim 10 or Claim 11.~~ The method of training a linearised transmitter according to claim 10 wherein the steps are performed in a storage medium storing processor.